

WHAT IS CLAIMED IS:

1. A digital camera with an automatic image transmission function, comprising:

a transmission section for transmitting photo images; and
 a transmission control unit connected to said transmission section, said transmission control unit judging whether a predetermined transmission allowance condition is satisfied and allowing the transmission of photo images when said predetermined transmission allowance condition is satisfied; wherein
 said predetermined transmission allowance condition includes a condition when photography is completed.

2. The digital camera as claimed in claim 1, further comprising
 a battery, wherein:

said transmission control unit includes a battery status-obtaining section connected to said battery, and said battery status-obtaining section obtains a storage level of said battery; and

said predetermined transmission allowance condition includes a condition when said battery has a predetermined storage level.

3. The digital camera as claimed in claim 2, further comprising
 an LCD monitor, wherein

said transmission control unit includes an image quality selection-obtaining section connected to said LCD monitor, and said image quality selection-obtaining section notifies a user that said photo images are transmittable by changing an image quality, based on the information of remaining storage level of said battery obtained by said battery status-obtaining section, and obtains a selection of said image quality from the user; and

said predetermined transmission allowance condition includes a condition when a data amount required for said selected

image quality is within a predetermined range.

4. The digital camera as claimed in claim 1, further comprising a timer, wherein:

said transmission control unit includes a time-obtaining section connected to said timer, and said time-obtaining section obtains time; and

said predetermined transmission allowance condition includes a condition when said time is in a predetermined time range appropriate for transmitting said photo images.

5. The digital camera as claimed in claim 4, wherein said transmission control unit notifies a user of a period of time to an end of said predetermined time range, based on said time obtained by said time-obtaining section.

6. The digital camera as claimed in claim 1, further comprising a memory that stores said photo images, wherein:

said transmission control unit includes a data amount-obtaining section connected to said memory, and said data amount-obtaining section obtains a data amount of said photo images to be transmitted; and

said predetermined transmission allowance condition includes a condition when a cost for transmitting said photo images calculated by said data amount is within a predetermined range.

7. The digital camera as claimed in claim 6, wherein said data amount-obtaining section accepts a selection of said data amount by a user.

8. The digital camera as claimed in claim 6, further comprising:

a volatile memory connected to said data amount-obtaining section, said volatile memory providing said stored photo images to said transmission control unit and erasing said stored photo

images after providing said photo images; and

a non-volatile memory connected to said data amount-obtaining section, said non-volatile memory storing said photo images after said transmission section transmits said photo images.

9. The digital camera as claimed in claim 1, wherein said predetermined transmission allowance condition includes a condition when a remaining time for transmitting said photo images is shorter than a predetermined time, in a case where a cost for a transmission is calculated based on unit communication time.

10. The digital camera as claimed in claims 1, further comprising a release switch; wherein

said transmission control unit includes a transmission control-obtaining section connected to said release switch, and said transmission control-obtaining section obtains an instruction to control transmission of each of said photo images after photography.

11. The digital camera as claimed in any one of claims 1 to 10, wherein said transmission control unit includes a transmission addressee registration section for registering a phone number of an addressee for transmitting said photo images.

12. The digital camera as claimed in claim 1, wherein:

said predetermined transmission allowance condition includes a condition when a number of said photo images to be transmitted reaches a predetermined number; and

the digital camera automatically transmits a plurality of said photo images at one time.

13. The digital camera as claimed in claim 1, wherein said predetermined transmission allowance condition includes a

condition when a predetermined period of time has passed after photography is finished.

14. The digital camera as claimed in claim 1, wherein:

said predetermined transmission allowance condition includes a condition when a power of the digital camera is to be turned off and there are said photo images to be transmitted; and

said power is turned off after a plurality of said photo images to be transmitted are automatically transmitted at one time.

15. The digital camera as claimed in claim 1, wherein:

said predetermined transmission allowance condition includes a condition when a power of the digital camera is turned on and there are said photo images to be transmitted, a plurality of said photo images are automatically transmitted at one time.

16. The digital camera as claimed in claim 1, further comprising a memory for temporarily and sequentially storing said photo images, wherein:

said predetermined transmission allowance condition includes a condition when at least one of a data capacity and a number of said photo images stored in said memory becomes more than a predetermined amount; and

the digital camera automatically transmits said photo images in an order that said photo images are stored.

17. The digital camera as claimed in any one of claims 1 to 16, wherein the digital camera automatically transmits said photo images when a wireless communication means is communicable.

18. The digital camera as claimed in any one of claims 1 to 17, wherein the digital camera suspends transmitting said photo images if a photography operation is started while transmitting said photo images, and restarts transmitting said suspended photo images after

said photography operation is finished.

19. The digital camera as claimed in any one of claims 1 to 18, wherein the digital camera has a plurality of said transmission allowance conditions, and said transmission allowance conditions are selectable.

20. A method for controlling a transmission, comprising:
judging whether or not a predetermined transmission allowance condition is satisfied;
transmitting photo images when it is judged that said predetermined transmission allowance condition is satisfied; and
judging whether or not photography is completed.

21. The method as claimed in claim 20, further comprising:
obtaining a storage level of a battery; and
judging whether or not said battery has a predetermined storage level.

22. The method as claimed in claim 21, further comprising:
notifying a user that said photo images are transmittable by changing an image quality, based on obtained information of remaining storage level of said battery;
obtaining a selection of said image quality from the user;
and
judging whether or not a data amount required for said selected image quality is within a predetermined range.

23. The method as claimed in claim 20, further comprising:
obtaining time; and
judging whether or not said time is in a predetermined time range appropriate for transmitting said photo images.

24. The method as claimed in claim 23, wherein said judging notifies

a user of a period of time to an end of said predetermined time range, based on said obtained time.

25. The method as claimed in claim 20, further comprising:

obtaining a data amount of said photo images to be transmitted; and

judging whether or not a cost for transmitting said photo images calculated by said data amount is within a predetermined range.

26. The method as claimed in claim 25, further comprising:

selecting a data amount by a user;

transmitting photo images corresponding to said data amount selected by the user.

27. The method as claimed in claim 20, further comprising

judging whether or not a remaining time of a transmission time for transmitting said photo images is shorter than a predetermined time, in a case where a cost for the transmission time is calculated based on unit communication time.

28. The method as claimed in claims 20, further comprising

obtaining an instruction to control transmitting for each of said photographed images, after photography.

29. The method as claimed in any one of claims 20 to 28, further comprising

registering a phone number of an addressee for transmitting said photo images.

30. The method as claimed in claim 20, further comprising:

judging whether or not a number of said photo images to be transmitted has reached a predetermined number; and

transmitting a plurality of said photo images at one time

when said number reaches said predetermined number.

31. The method as claimed in claim 20, further comprising
judging whether or not a predetermined period of time has
passed after photography is finished.

32. The method as claimed in claim 20, further comprising:
judging whether or not a power of the digital camera is to
be turned off; and
judging whether or not there are said photo images to be
transmitted, wherein

said power is turned off after a plurality of said photo
images to be transmitted are automatically transmitted at one time.

33. The method as claimed in claim 20, further comprising:
judging whether or not a power of the digital camera is turned
on; and

judging whether or not there are said photo images to be
transmitted, wherein

a plurality of said photo images are automatically
transmitted at one time.

34. The method as claimed in claim 20, further comprising
temporarily and sequentially storing said photo images in
a memory;

judging whether or not at least one of a data capacity and
a number of said photo images stored in said memory has become
more than a predetermined amount; and

automatically transmitting said stored photo images in an
order of storage.

35. The method as claimed in claim 34, further comprising
erasing said photo images from a main memory after
transmitting.

36. The method as claimed in any one of claims 20 to 35, further comprising:

obtaining information whether or not a wireless communication means is communicable; and

automatically transmitting said photo images when a wireless communication means is communicable.

37. The method as claimed in any one of claims 20 to 36, further comprising

suspending transmitting of said photo images if a photography operation is started while transmitting said photo images and restarting transmitting said suspended photo images after said photography operation is finished.

38. The method as claimed in any one of claims 20 to 37, wherein said judging is based on a plurality of conditions.